## **ABSTRACT**

There is provided first storage means (3) for storing digital reception beam data converted from a reception beam formed from an ultrasonic received signal; first control means (2) for controlling reading and writing of data from/in the first storage means; a filter coefficient calculation portion (5) for calculating a filter coefficient based on information on the reception beam, the information including a positional relationship between the reception beam and a transmission beam; and a first spatial filter operation portion (4) for subjecting each of a plurality of the reception beam data including data of beams received in parallel from a single transmission beam to filtering processing for reducing a difference in image quality between adjacent beams based on the filter coefficient. Image data output from the first spatial filter operation portion are converted into scanning of a display monitor (8) so as to display an image on the display monitor. In an ultrasonic diagnosis apparatus having a parallel reception function, it is possible to display a high-quality ultrasonic image in which stripes are generated less in a direction in which acoustic lines are arranged and that is well defined in detail.

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